

**EPA Comments on the District of Columbia
Draft Phase I Watershed Implementation Plan**

This document provides the District Department of the Environment (DDOE) with the results of the U.S. Environmental Protection Agency's (EPA) evaluation of District of Columbia's draft Phase I Watershed Implementation Plan (WIP). The document expands upon the conference call between DDOE and EPA staff on September 23, 2010 and the letter and WIP Evaluation Fact Sheet that Regional Administrator Shawn Garvin sent to Director Tulou on September 24. This enclosure describes in more detail EPA's key areas of concern and ways the District of Columbia can improve the Phase I WIP. It is anticipated that this enclosure coupled with subsequent meetings and calls among EPA and DDOE staff will provide sufficient detail for District of Columbia to improve its final WIP due to EPA on November 29, 2010, and the Phase II WIP in 2011. EPA looks forward to meeting with DDOE to further this dialogue and appreciates efforts to schedule this meeting as soon as possible. EPA also looks forward to reviewing revised WIP scenario runs starting as early as this week.

Section I: Overview of WIP

Thank you for the time and effort DDOE has invested in order to submit the District of Columbia's draft WIP by September 1, 2010. As the NPDES permitting authority in the District, EPA recognizes its unique partnership with the District in achieving these clean water goals. EPA looks forward to working with the District of Columbia towards an enhanced WIP, a strong TMDL, and a healthier Chesapeake Bay watershed.

EPA appreciates DDOE's submission of the draft Phase I WIP on September 1. Over the last few weeks, EPA sector experts and others have reviewed the WIP in detail and have developed general and more detailed recommendations. Overall, EPA reviewers are pleased with the draft Phase I WIP and view it as a very good start. The following comments are intended to provide general recommendations across the entire WIP as well as sector specific recommendations and suggestions for completing the final Phase I WIP.

The latest District of Columbia WIP input deck achieves the 2017 interim nitrogen, phosphorus and sediment targets. The input deck achieves the final targets for nitrogen and phosphorus (3-5% under the targets) but does not achieve the target range for sediment. EPA reviewers note that the WIP does not reflect the current state of storm water management controls and performance standards outlined in the draft District of Columbia MS4 permit. Since land-based sources tend to contribute large loads of sediment, EPA feels that the gap closing strategy for the District of Columbia should focus on the more effective retention approaches outlined in the draft DC MS4 permit.

Secondly, the District of Columbia is unique among Bay jurisdictions in that the primary nutrient and sediment contributions from the District of Columbia are regulated by

NPDES permits. This provides a unique opportunity to develop a WIP that relies on specific NPDES permit conditions to address the practices needed to meet TMDL wasteload and load allocations. Across all sectors, the WIP should provide a more comprehensive set of actions, programs and practices which will in turn guide NPDES permits requirements between now and 2025.

Overall, the District of Columbia WIP is well written and provides great detail as to sources, existing programs and practices by sector, but there are some gaps in the plan that should be addressed in the final submission. The most significant gap is that the WIP does not meet sediment allocations and the plan does not address the very aggressive green infrastructure approaches laid out in the draft District of Columbia MS4 permit. Because of these deficiencies, EPA is proposing to provide **minor backstop allocations** as a basis for future stormwater management controls in permits. More detail is included in Sections III and IV.

Section II: Addressing Sector Area Concerns & Opportunities for Improvement

The District of Columbia WIP addresses loads from the city's two primary contributing sectors - wastewater and stormwater. The WIP addresses the issue of growth in the context of Blue Plains and assumes that development and redevelopment practices will offset additional loads as more development occurs. The WIP also acknowledges the need and opportunity to work with federal facilities in meeting the allocations.

Urban Stormwater: Some Minor Deficiencies in Gap-Filling Strategies

EPA appreciates that the District of Columbia draft WIP provides a detailed inventory of current implementation activities and milestones required by the District's existing MS4 permit. These include some of DC's signature stormwater commitments like tree planting and the extremely popular Riversmart Homes program (used by DDOE to implement low-impact development activities and Permit requirements) which is now being extended to include multifamily units. The 2009 Upgraded Stormwater Management Plan clarifies the Mayor's authority to perform inspection, surveillance and monitoring activities as part of its NPDES regulatory authority. This is important in providing reasonable assurance that the District of Columbia will be able to enforce the commitments contained in the WIP.

The two-year milestones reporting format and the detailed matrix of implementation activities required by the 2007 and 2008 Letter Agreements to the DC MS4 Permit are very good models going forward for tracking and verification of required activities, and should remain in the final WIP.

High Priority for Addressing as Part of Final Phase I WIP

Despite these strengths, DC's draft WIP is deficient in a number of respects. First, with regard to nutrient and sediment loads, the draft WIP does acknowledge urban run-off as a significant contributor of nutrient and sediment loads to the Bay, indicating that 36% of the sediment loads from District sources are associated with urban run-off. At the same

time, however, the draft WIP does not demonstrate how the District expects to meet the August 2010 sediment ranges, which require the total District sediment loads to fall between 10 and 11 million pounds per year. The WIP input deck submitted to EPA on September 1 estimates that the sediment loads from District sources would be approximately 15 million pounds per year, and therefore exceed the allocation by approximately 25%. Also, the draft WIP does not set forth an aggressive set of actions for controlling or reducing sediment. In fact, EPA notes that DC's input deck lacks erosion and sediment control measures. EPA is unsure whether this omission was intentional or an oversight, given the applicability of EPA's Construction General Permit requirements and the District's stormwater regulations.

In addition, EPA is concerned that the draft WIP fails to incorporate certain aggressive provisions contained in EPA's draft permit (proposed in April 2010). While that permit has not yet been finalized, the draft WIP should have more accurately aligned with the current draft and anticipated requirements. For example, the draft permit proposes a retention standard for new and redevelopment, retrofit objectives, and numeric objectives for trees and green roofs. A WIP and input deck more reflective of these approaches would provide a gap-filling role, particularly for sediments. EPA recognizes its role as the MS4 permit writer for the District, and plans to work closely with DDOE and with the public comments we have received to incorporate permit conditions and anticipated reductions from the draft MS4 permit into the final WIP. EPA anticipates that these provisions will help the District with gap-filling -- particularly for meeting the sediment allocations.

While the draft WIP does outline some projects and programs to achieve reductions in nutrients and sediment, it lacks corresponding detail on or support for the anticipated load reductions. Further, the draft WIP does not provide timelines for obtaining reductions from these commitments.

Although the District of Columbia has a decent framework for tracking implementation (based on the 2008 Letter Agreement to the DC MS4 Permit and the Chesapeake Bay Program's 2-year milestones), the final WIP should reiterate the District's commitment of resources to tracking and verification through inspection and enforcement, consistent with the 2017 and 2025 timelines.

In preparation for the final WIP and as a means of closing the gap, EPA will be exploring the following options and many others with the District of Columbia:

- Conducting focused discussions with DC on sediment and approaches to minimizing sediment (e.g. construction limits, stream restoration)
- Exploring available funding opportunities for stream restoration
- Assuring that existing sediment TMDLs are being implemented
- Assuring compliance with 2008 Letter Agreement to DC MS4 Permit
- Expanding NPDES coverage
- Increasing enforcement and compliance

Wastewater: Some Minor Deficiencies in Gap-Filling Strategies

A significant contributor of nitrogen and phosphorus is wastewater associated the Blue Plains Wastewater Treatment Plant (WWTP) and the District of Columbia's Combined Sewer System (CSS). The WIP details actions mandated through the Long Term Control Plan (LTCP) as well as planned actions to meet requirements of the NPDES permit. Both the permit and the LTCP mandate limits, reductions, specific actions and timelines which provide assurance that interim and final reductions discussed in the WIP will be met by 2017 and 2025 respectively.

The WIP does acknowledge its agreement with EPA to inspect wastewater facilities which strengthens verification and tracking of the permit milestones. This shared responsibility provides reasonable assurance that the targets will be met through 2025.

During recent years, strong interest locally and among members of Congress has resulted in funding to make improvements consistent with the LTCP. This interest and support should continue as the Potomac River, the Anacostia River, and the Chesapeake Bay remain an important focus in the region.

High Priority for Addressing as Part of Final Phase I WIP

EPA Region 3 staff expressed concerns that the WIP does not include a full list of non-significant point sources in the District of Columbia. The WIP references the Washington Aqueduct, General Services Administration – West Heating Plant, Pepco Benning Road Generating Station, and WMATA –Mississippi Avenue facility. If additional non-significant point sources exist and are not part of the listed facilities in the WIP/TMDL, they will receive a zero (“0”) wasteload allocation. This could severely restrict or eliminate them as dischargers.

In a September 23 call, DDOE noted that while the District of Columbia is aware of additional non-significant point sources, sufficient information on discharges does not exist. In the final WIP, DDOE should work with local agencies and EPA to assure that all non-significant point sources are accounted for in the WIP and included in the aggregate wasteload allocation. EPA stands ready to assist in developing this list and clarifying which facilities should be covered where uncertainty exist.

Growth

The District of Columbia's WIP estimates that the District of Columbia's population will increase 17% by the year 2025. As the city is largely built out, DC anticipates that most of this growth will occur in the existing development footprint and will be in the form of redevelopment. The WIP anticipates that the increased loads from development and redevelopment will be controlled through aggressive development, redevelopment, and erosion and sediment control regulations. In fact, the 2010 MS4 permit conditions should result in a net decrease in nutrient and sediment loads from redeveloped lands.

Furthermore, the WIP acknowledges that Blue Plains design capacity will not be reached until 2030.

High Priority for Addressing as Part of Final Phase I WIP

The District of Columbia WIP clearly states that Blue Plains capacity is sufficient to accommodate growth thru 2030. However, the WIP also sets aside additional capacity at Blue Plains to accommodate growth. In doing so, EPA notes that the flow rates are adjusted and exceed the total capacity for the three jurisdictions. The District of Columbia should engage in discussions with appropriate stakeholders and should clarify with EPA, Maryland and Virginia that the District of Columbia is setting aside the appropriate allocation for growth at Blue Plains.

Federal Facilities: Some Minor Deficiencies in Gap-Filling Strategies

The District of Columbia WIP acknowledges the importance of addressing nutrient and sediment contributions from all sources including federal facilities. As federal facilities occupy 1/3 of the total District of Columbia's land area, obtaining reductions from these areas is critical. The WIP does begin to identify potential projects and reductions from federal properties and touches upon efforts to coordinate EISA requirements. However, this portion of the WIP should be strengthened as the District of Columbia continues to provide leadership on effective integration of federal facility actions into the planning and tracking of meeting load allocations. EPA will engage the assistance of the other federal partners in the Bay restoration through the Federal Leadership Committee to assist in securing the support needed here.

High Priority for Addressing as Part of Final Phase I WIP

The District of Columbia's WIP does not appear to provide a complete list of General Services Administration (GSA) facilities. EPA has been working with GSA and the District of Columbia to develop GIS layers to determine more specific coverage of federal facilities in the District of Columbia. The District of Columbia should incorporate this detail in the final Phase I WIP.

In addition, the WIP could take a more definitive approach and identify specific commitments for federal lands like retrofit and stream restoration that the federal agencies would be committed to implement per the language of the Executive Order Strategy:

Waste load and load allocations and reduction plans for individual federal facilities and installations will be set following one of two general approaches: a) states would establish explicit load reduction expectations for individual federal facilities as part of the WIP process; or b) based on broad load reduction goals established by the state, individual federal facilities/installations would develop Federal Facility Implementation Plans that would demonstrate to the state how the facility proposes to achieve needed load reductions. In either case, the states and the District would ultimately decide what loading reductions to propose for federal facilities in its WIP,¹

¹ *Executive Order 13508: Strategy for Protecting and Restoring the Chesapeake Bay Watershed* (2010), developed by the Federal Leadership Committee for the Chesapeake Bay, May 12, page 25.

This would form the numeric basis for establishing federal cooperation to meet the waste load and load allocations. Although many of the federal facilities are in the CSO area and do obtain stormwater treatment at Blue Plains, the WIP should encourage federal leadership by example. Furthermore, retrofit on these facilities would minimize the need for expensive structural approaches.

The WIP does state the need for federal (NPS) cooperation on stream restoration. This should be tied to a sediment reduction estimate and overall environmental benefit that would therefore build these commitments into the assumptions of the TMDL allocations so that the federal agencies were informed and could develop appropriate responses as described in the Federal Strategy. Also the WIP should specifically identify other federal stream restoration opportunities and needs.

Finally, the WIP should describe the enforcement mechanism that applies to federal facilities including the district's authority to take enforcement action related to stormwater legal requirements. The WIP should detail the unique combined enforcement authorities of the District of Columbia and EPA given the special circumstances that include EPA's role as permit writers.

Section III: Backstop Allocations

As stated previously, the District of Columbia's WIP does meet the allocations for nitrogen and phosphorus for the interim 2017 and the final 2025 targets. In fact the WIP projects that these loads fall within 3-5% of the targets. However, the District of Columbia anticipates meeting the 2017 interim sediment allocation, but does not anticipate meeting the final 2025 target.

EPA is proposing a minor backstop to assure that the District of Columbia meets the upper range for sediment which is approximately 11 million pounds per year. EPA will ensure that all allocations, including sediment, are met through the NPDES permits issued within the District of Columbia. EPA has begun to translate commitment from the draft permit into input decks with a particular focus on practices which obtain sediment reductions and will share the results with D.C. as part of our joint efforts to strengthen the WIP in the next 2 months.

Section IV: Other Federal Backstop Options

As EPA is the permit writer for NPDES permits in the District of Columbia, the Agency will continue to work with the DDOE to develop sufficiently protective and detailed permits that meet local and bay water quality standards. EPA will also continue to review and comment upon grant workplans to assure that the District of Columbia's resources and expertise are focused upon meeting the two year milestones and the commitments necessary to meet the allocations.

Where necessary, EPA will expand NPDES coverage in order to address sources that are not currently regulated or areas that are not appropriately regulated. Furthermore, EPA will work with DC to assure that inspection and enforcement programs and resources are sufficient to meet the commitments of this WIP including district and federal owned lands.

Pursuant to the December 29, 2009 letter from Regional Administrator Shawn Garvin to the Chesapeake Bay Principals' Staff Committee, EPA may consider applying other federal backstop actions in addition to those listed in Section III to ensure that jurisdictions develop and implement sufficient WIPs and achieve nutrient and sediment load reductions as evidenced through two-year milestones.

Section V: Other Suggested Improvements/Final Comments

In its June 11, 2010 letter to the Principals Staff Committee, EPA indicated that it would include for each jurisdiction a separate Temporary Reserve for both nitrogen and phosphorus for the purposes of WIP development and incorporating contingency actions. The Temporary Reserve is based on possible changes to nitrogen and phosphorus allocations that could result from two forthcoming model refinements to Phase 5.3 of the Chesapeake Bay Program Watershed Model.

In his July 1 letter to the Principals Staff Committee communicating the major basin and jurisdiction nutrient allocations, EPA Regional Administrator Shawn Garvin announced that this reserve would be 5%. The Regional Administrator explained in that letter that the Agency expects jurisdictions to account for this 5% Temporary Reserve as an element of their contingency actions in their Phase I WIPs, in the event that the 2011 refinements to the Phase 3.5 Chesapeake Bay Watershed Model result in draft allocations lower than those provided to you on July 1, 2010. EPA will work with the District to incorporate this 5% Temporary Reserve into the final Phase I WIPs. Depending on the results of the 2011 model refinements, the Temporary Reserve will be revised or removed as appropriate during the 2011 Phase II WIP development process.

Additional suggestions will be provided at one on one meeting between EPA and the District of Columbia.

Section VI: Closing

Thank you again for the District of Columbia's submission of the draft Phase I WIP on September 1, 2010. EPA's appreciates the District of Columbia's interest in working with EPA to address these deficiencies in advance of the final TMDL. Between late September and early October, EPA will be arranging one-on-one discussions with DDOE. During these discussions EPA will clarify in detail the comments and the issues that should be addressed in the final WIPs. For the most part, many of the opportunities for improvement of the District of Columbia's WIP are in the area of stormwater. As the permit writer, EPA will be engaging in dialogue with DDOE to determine how the draft

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permit can help meet the sediment loads and how the reasonable assurance for gap-filling strategies can be addressed.

We look forward to working with you on the public meeting on the draft TMDL and draft WIP scheduled for September 29 in the District. We also look forward to scheduling a face-to-face meeting as soon as possible to work together with you in addressing these comments.